

REMARKS

The present response requests reconsideration of the rejected claims and is presented in further response to the Office Action dated June 20, 2003, and in response to the Advisory Action dated October 22, 2003.

Claims 1-4 and 9-18 are rejected under 35 U.S.C. 103(a) for allegedly being unpatentable based on Yamaki. This rejection is respectfully traversed.

The presently claimed invention is patentably distinguishable from Yamaki at least based on the high solids content claimed. The Advisory Action contends that since Yamaki does not require any solvent, it reads on any solids content. There is simply no support for this statement in Yamaki or in the field of art.

It is, thus, submitted that Yamaki does not teach or suggest how to make its composition with a high solids content (i.e., more than 70% solids by weight) and, thus, does not meet the enablement requirements of 35 U.S.C. 112, first paragraph.

Yamaki does not state or anywhere imply that no solvent is required. Indeed, as discussed below, Yamaki clearly uses solvents in its processing steps and does not disclose any means for removing them or otherwise increasing the solids content. Further, a requirement for a solvent would not be found in the claims, because claims do not state what is known in the art.

The present application discloses that the claimed high solids content can be achieved by taking positive steps, for example, by preparing the alkoxysilyl-functional acrylic polymer in the presence of a reactive diluent. Page 6, lines 4-7.

Another way of achieving a high solids content is disclosed in US Pub. No. 2002/0011177 A1 (Yamamori et al.). Yamamori et al. state at page 1, paragraph 4, that it is an object of their invention to provide a high-solid antifouling coating. At page 1, paragraph 18, it is indicated that a composition having a VOC of not more

than 400 g/L is to be obtained. At page 2, paragraph 20, it is explained what is necessary, in terms of the acrylic resin, to obtain a high solids composition that is suitable as a coating composition. At page 3, in paragraph 29, it is explained how such an acrylic resin can be prepared.

Yamaki neither teaches nor suggests any means for achieving a high solids content. Yamaki's disclosure that solvents can be added to further dilute the composition does not provide any teaching or suggestion of a means for achieving a high solids content. Yamaki utilizes solvents in its processing steps and does not remove them, so there is no basis for the skilled artisan to think that the composition disclosed in Yamaki would have a high solids content. This is further discussed below.

Yamaki relates to compositions comprising components A, B, C, and D. As recognised by the Examiner, component A, which is a silica-dispersed oligomer solution of an organosilane, has a low solids content. This is confirmed by Preparation examples A-1 and A-2 where silica-dispersed oligomer solutions of organosilane are obtained having a solids content of 36%.

Yamaki explains in column 9, lines 40-45, that the acrylic resin (B) can be obtained by a known synthesis method, for example, radical polymerisation, anion polymerisation, or cation polymerisation. These polymerisations can be performed by suspension polymerisation, emulsion polymerisation or solution polymerisation. An example is given, at column 9, lines 46-52, of a method for radical polymerisation by solution polymerisation.

Suspension polymerisation, emulsion polymerisation, and solution polymerisation all require a liquid in which the polymerisation takes place (it is not considered necessary to provide references on such well known processes, but they can be supplied if requested). Hence, these polymerisation processes will result in an acrylic resin (B) having a low solids content. This is confirmed by Preparation examples B-1 to B-4, where 40% toluene solutions of acrylic resins are obtained.

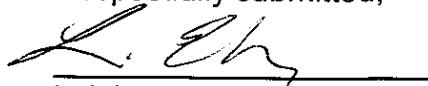
The polyorganosiloxane (D) can be obtained, for example, by hydrolysis, with plenty of water in a known method, see column 11, lines 40-46. Though the description does not elaborate on such methods, an example of a preparation method can be found in Preparation Example D-1 in column 20. In this preparation example, the hydrolysis of silanes with plenty of water is performed in a mixture comprising acetone and toluene. The result is a 60% toluene solution of a polyorganosiloxane.

Hence, when prepared according to the methods suggested by Yamaki, not only component A, but also components B and D have a low solids content. Consequently, a mixture of A, B, C and D prepared according to the teaching of Yamaki necessarily has a low solids content. This is confirmed by the examples. According to column 13, lines 32-33, such a composition can be even further diluted, which is performed in the examples (see column 21, lines 28-33).

In accordance with the above discussion, Yamaki provides no guidance whatsoever to the skilled artisan interested in a coating composition with a high solids content. Thus, the claimed invention which has more than 70% solids by weight is not obvious based on Yamaki.

A Notice of Appeal is being filed simultaneously herewith to maintain the pendency of the application and to permit applicant to file an appeal brief if necessary.

Respectfully submitted,



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